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	APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
	10/010,698	11/05/2001	Matthew T. Uyttendaele	MSFT-0319/144221.2 7061	
	41505 7590 12/22/2004			EXAMINER	
		K WASHBURN LLP Y PLACE - 46TH FLOOR		CORRIELUS, JEAN M	
	PHILADELPH	HIA, PA 19103		ART UNIT	PAPER NUMBER
				2162	

DATE MAILED: 12/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)	<u>.</u>
• • • •	10/010,698	UYTTENDAELE ET AL.	5
Office Action Summary	Examiner	Art. Unit	
	Jean M Corrielus	2162	
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address	
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply 1 If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	i6(a). In no event, however, may a reply be time within the statutory minimum of thirty (30) days ill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).	
Status			
1) Responsive to communication(s) filed on <u>05 No</u>	ovember 2001.		
2a) ☐ This action is FINAL . 2b) ☒ This	action is non-final.		
3) Since this application is in condition for allowan	ce except for formal matters, pro	secution as to the merits is	
closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 11, 45	3 O.G. 213.	
Disposition of Claims			
4) Claim(s) <u>1-42</u> is/are pending in the application.			
4a) Of the above claim(s) is/are withdraw	n from consideration.		
5)⊠ Claim(s) <u>27-42</u> is/are allowed.			
6)⊠ Claim(s) <u>1-26</u> is/are rejected.			
7) Claim(s) is/are objected to.	•		
8) Claim(s) are subject to restriction and/or	election requirement.		
Application Papers		•	
9) The specification is objected to by the Examiner	•		
10) The drawing(s) filed on is/are: a) acce		Examiner.	
Applicant may not request that any objection to the d			
Replacement drawing sheet(s) including the correction	on is required if the drawing(s) is obj	ected to. See 37 CFR 1.121(d).	
11) The oath or declaration is objected to by the Exa	aminer. Note the attached Office	Action or form PTO-152.	
Priority under 35 U.S.C. § 119			
12) Acknowledgment is made of a claim for foreign	priority under 35 U.S.C. § 119(a)	-(d) or (f).	
a) ☐ All b) ☐ Some * c) ☐ None of: 1. ☐ Certified copies of the priority documents	have been received		
1. Certified copies of the priority documents2. Certified copies of the priority documents		on Mo	
3. Copies of the certified copies of the priori			
application from the International Bureau		a in this Hational Stage	
* See the attached detailed Office action for a list of	• • • • • • • • • • • • • • • • • • • •	d.	
	•		
Machine and (1)	•		
uttachment(s)) Notice of References Cited (PTO-892)	4) Interview Summary	(PTO 413)	
) Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Da	te	
) M Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 3/13/02.	5) Notice of Informal Pa	atent Application (PTO-152)	
Patent and Trademark Office			

DETAILED ACTION

1. This office action is in response to the application filed on November 5, 2001, in which claims 1-42 are presented for examination.

Information Disclosure Statement

2. The information disclosure statement (IDS) filed on March 6, 2002 complies with the provisions of M.P.E.P. 609. It has been placed in the application file. The information referred to therein has been considered by the examiner.

Drawings

3. Applicants are required to furnish the formal drawings in response to this office action.

No new matter may be introduced in the required drawings. Failure to timely submit a drawing will result in ABANDONMENT of the application.

Claim Rejections - 35 USC § 112

- 4. The following is a quotation of the second paragraph of 35 U.S.C. 112:
 - The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 5. Claims 1-5 and 22-26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1 and 22, the following limitation is vague and unclear: "A system having a plurality of actions available for traversing a directing graph, the directed graph including a plurality of containers, each container having a type value and being instantiated based on one of a plurality of container types, each action including an action method table comprising a plurality of action methods, each action when traversing the directed graph employing the type value of an encountered container, the system further having a run-time information library which includes a plurality of information objects, each information object representing one of an action and a container type" [note: claim 1 and 22]. It is difficult to determine distinct boundaries between precise claim limitations in the claim. There is not a distinction between the preamble of the claim and the body of the claim. As presently written the claim can be described as a run-on claim with no clear separation of claim elements and/or limitations. Note *Festo Corp. v. shoketsu Kogyo Kabushiki Co.*, 234F.3d. 558, 56 USPQ2d 1865 (fed.Cir.2000).

Regarding independent claims 2-5 and 23-26 are rejected based on respective dependency.

Claim Rejections - 35 USC § 101

6. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

7. Claims 1-21 are rejected 35 U.S.C. 101 because they are directed to non-statutory subject matter, specifically, as directed to an abstract idea.

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Claims 1, 6, 10, 12, 17 and 19 define non-statutory processes because it merely manipulates an abstract idea without a claimed limitation to a practical application. Data structure not claimed as embodied in computer-readable media is descriptive material per SE and is not statutory because they are neither physical nor statutory processes. Structural and functional interrelationship with a general-purpose computer for permitting claimed functions to be realized are not provided in the claims. In contrast, a claimed system should define structural and functional interrelationships between data structures or functional parts and a computer system which permit the data functions to be realized, and is statutory. Thus, the claimed are rejected as being non-statutory. Additionally, the invention, as claimed, is directed to the manipulation of an abstract idea with no practical application in the technology arts. The claim sets forth a method or a system having a plurality of action for traversing a directed graph. The language of the claim does not transform the claimed subject matter into statutory subject matter. Clearly, the recital is merely a field of use or desired end of use limitation. Data that are merely stored or contained in a memory (or database) are simply functional descriptive material without being executed by a general-purpose computer. Thus, the claim is lack a practical application in the technological arts. Applicant is advised to amend the claim by specifying the claim being directed to a practical application and being executed by a general purpose computer in order to correct the above indicated deficiencies.

For the purpose of examination, the examiner has considered "a method or a system having a plurality of action for traversing a directed graph" as —A computer implemented method or a system having a plurality of action for traversing a directed graph—.

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Regarding independent claims 2-5, 7-9, 11, 13-16, 18 and 20-21 are rejected based on respective dependency.

Claim Rejections - 35 USC § 103

- 8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 9. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
- 10. Claims 1 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Huetter US Patent no. 6,324,550 and Tuzhilin et al., (hereinafter "Tuzhilin") US Patent no. 6,292,797. As to claim 1, Huetter is directed to a cleaner task for a computer system having a plurality of task for performing function on objects. In particular, Huetter discloses the claimed "a plurality of actions available for traversing a directed graph" as a plurality of tasks traversing the directed graphs commencing at the respective initial stating points of the graphs (col.2, lines 19-25). Applicants should dully note that in hierarchical databases, objects may be grouped in

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containers, wherein container object server as a root of a particular sub tree. So, Huetter discloses the claimed "the directed graph including a plurality of containers, each container having a type value and being instantiated based on one of a plurality of container type" as plurality of data objects, wherein each comprises at least one data record at least a pointer to point to the location of another object (col.3, lines 30-40). Huetter also discloses the claimed having a run-time information library, which includes a plurality of information objects, each information object representing one of an action and a container type" (col.4, lines 22-30). It is important to note that an action is performed by traversing a directed graph and executing it at each container (object) through the use of a table function pointers. However, Huetter does not explicitly discloses the claimed "each action when traversing the directed graph employing the type value of an encountered container as a offset into the action method". Tuzhilin, on the other hand, discloses the claimed "each action when traversing the directed graph employing the type value of an encountered container as a offset into the action method" as a table function pointers (col.13-23; col.7, lines 25-57). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Huetter's system by incorporating the use wherein each action when traversing the directed graph employing the type value of an encountered container as a offset into the action method, the same conventional manner as described by Tuzhilin (col. 13-23; col. 7, lines 25-57). One having ordinary skill in the art at the time the invention was made would have found it motivated to utilize such a modification because that would provide Huetter's system the enhanced capability of allowing easy, intuitive input of the actions by a user, thereby maintaining the integrity of information in the container.

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Allowable Subject Matter

11. Claims 2-5 and 23-26 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

- 12. Claim 2-21 and 23-26 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph and U.S.C. 101, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.
- 13. Claims 27-42 are allowable in light of the prior art made of record.

Reasons for Indicating Allowable Subject Matter

14. The following is an examiner's statement of reasons for allowance: Upon searching a variety of databases, the examiner respectfully submits that – updating appropriate ones of the actions methods table to be the specific action methods associated with the added container types if any based on the information obtained from the run-time information library, wherein action methods in the copied entries of the action method table of the action of interest that are not updated are action methods inherited from the parent action—and; —defining specific action methods to be performed by the new action with regard to at least some of the container types in the system based on the functionality to be imparted and thereby at least implicitly designating action methods to be inherited by the new action from the parent action, the inherited action methods to be performed by the new action with regard to the other container types in the

system-- in conjunction with all other limitations of the dependent and independent claims are not taught nor suggested by the prior art of record (PTO-892). Therefore, the pending claims 27-42 are hereby allowed.

15. Since allowable subject matter has been indicated, applicant is encouraged to submit formal drawings in response to this Office action. The early submission of formal drawings will permit the Office to review the drawings for acceptability and to resolve any informalities remaining therein before the application is passed to issue. This will avoid possible delays in the issue process.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance".

Conclusion

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean M. Corrielus whose telephone number is (571) 272-4032. The examiner can normally be reached on Monday - Friday (12:00pm - 7:30 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E. Breene can be reached on (703) 305-9790. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application

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Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jean M. Corrielus

Patent Examiner

December 10, 2004